

WHAT IS CLAIMED IS:

Sub B1
1 1. A cell creation method of control line signals for
2 an ATM network comprising a plurality of multiplexing
3 equipments realizing communication among information
4 terminals, comprising the steps of:
5 creating cells from user data to be transmitted
6 between a pair of the communicating information terminals
7 and control line signals indicating control line
8 information relating the transmission of said user data at
9 said multiplexing equipment connected to said pair of the
10 communicating information terminals respectively, and
11 transmitting said cells including said user data and
12 said control line information between said pair of the
13 communicating information terminals.

1 2. A cell creation method of control line signals in
2 accordance with Claim 1, wherein
3 a portion of a cell payload to be transmitted is
4 mapped for transmitting said control line signals when
5 creating said cell from said control line signals, and
6 said control line signals are multiplexed into said
7 cell at the transmission side and separated from said cell
8 at reception side.

1 3. A cell creation method of control line signals in

2 accordance with Claim 2, wherein

3 signal RS/CD of said control line signals is
4 extended for a predetermined period before said signal
5 RS/CD is multiplexed.

1 4. A cell creation method of control line signals in
2 accordance with Claim 1, wherein

3 said multiplexing equipment connected to said pair
4 of the communicating information terminals has two
5 operating modes which can be selected, one being a control
6 line signal transmission mode for transmitting said control
7 line signals by creating said cell from said control line
8 signals, the other being a constant fix mode for executing
9 a full duplex communication.

1 5. A multiplexing equipment, being one of a plurality
2 of multiplexing equipment included in an ATM network for
3 realizing communication between information terminals,
4 connected to one of the communicating information
5 terminals, comprising:

6 multiplexing means creating cells from control line
7 signals outputted from one of said information terminals at
8 the transmitting side, and

9 separation means separating said control line
10 signals from said cells transmitted via said ATM network
11 and outputting said separated control line signals to one

12 of said information terminals at reception side.

1 6. A multiplexing equipment, being one of a plurality
2 of multiplexing equipment included in an ATM network for
3 realizing communication between information terminals,
4 connected to one of the communicating information
5 terminals, executing one of said cell creation methods of
6 control line signals in accordance with Claims 1-4.